1. Objective

- Houses of Champagne started in the 1700s while co-ops have processed bottles since 1960s
- Often rumors state that co-ops could acquire a well established international brand to enlarge their business on the most profitable markets outside EU

=> Objective: to identify the strategy and performance of co-ops processing Champagne

Outline

To reach the objective:

1. Literature review
2. Champagne industry Context
3. Method and data
4. Results
5. Conclusions

1. Literature

Vertical coordination

- **Vertical coordination** continuum (Williamson, 1973)
- New institutional economics: **transaction costs and institutional environment** (Ménard & Shirley, 2005a)
- French school *filières* (food chain): **power as a key driver** of leadership and management (Malassis, 1973)
1. Literature

- Quality incentives and supply contracts in the wine chains (Gaucher, Soler and Tanguy, 2002)
- Optimal procurement, inventory policies, chain profits according to various levels of coordination (Gaucher, Hovelaque and Soler, 2000)

'Cobweb' phenomena

- Cycles: in a cobweb phenomena, economic agents have adaptive expectations through time (Chiarella, 1988)
- It takes 3 years to turn grapes into Champagne => Delays in supply adjustment to demand => jumps/drops in retail prices in economic booms/recession => cycles (Declerck, 2005)
- Managing price cycles in the Champagne industry and System Dynamics modeling (Declerck & Cloutier, 2008)

2. Champagne industry context

- 1911: Houses of Champagne bought grapes outside Champagne; Vine growers could not sell grapes
- 1927: PDO rule: Champagne made with grapes from an appellation of 35,355 ha
- 1920’s: Establishment of the first co-ops to collect grapes to avoid strong price pressure from Houses to press grapes, make bottles for vine growers who may sell bottles
- But, vine growers think they can be freer if they sell bottles. Since 1960s, co-ops have developed the processing of bottles

2. Industry context

In 2008 sales = 323 million bottles, € 4.4 billion (historical record in 2007: 339 mn bottles, € 4.6 bn)

16,000 vine growers own 90% of vineyard

Champagne makers:

- 297 Houses of Champagne sell 66% of bottles, but only own 10% of Champagne vineyard
- 65 Co-ops with 13,000 vine growers
- 4,729 vine growers sell bottles

Champagne wine is made with a blend grapes coming from
- any of the 319 crus (villages)
- any harvest year
- any of the 3 grape varieties: Chardonnay, Pinot noir, Pinot Meunier

Two PDO legal factors limiting supply:

- Yield: 13,000 to 15,500 kg/ha
- Production area of 32,900 ha reached the size limit (extension by about 6,00 ha within a decade)
2. Industry context

Figure 1: Champagne vineyard in production, 1978 - 2008

The Appellation size limit is reached: Within 10 years, it will be enlarged.

Figure 2: Average yield of Champagne grapes in kg/ha, 1978 - 2008

Figure 3: Current price of Champagne grapes from 1978 to 2008 (in €/kg)

Figure 4: Price of Champagne grapes from 1978 to 2008, expressed in constant terms (base: 2008, €)
2. Industry context

Figure 5: World shipments of Champagne from 1978 to 2008 (in million bottles)

- Per unit price peaks in 1979, 1989, 1999, and 2007 followed by a price low within a 3 year delay
- Vertical coordination mechanisms limited the ability of *Houses of Champagne* to respond to financial risks due to severe short-term reduction in demand
- Average per bottle price stable between 1978 – 2008 (inflation factored in)

Figure 6: International versus domestic price of a bottle of Champagne expressed in constant terms (base: 2008, €)

- Price per bottle outside France
- Average price per bottle weighted by sales
- Price per bottle in France

Figure 6: Price of a bottle of Champagne and price of grapes harvested 3 years earlier
2. Industry context

Figure 7: World shipments of Champagne from 1978 to 2008 in function of deflated price per bottle expressed in constant terms (base: 2008, €)

3. Method & data

Sources of data
- Comité Interprofessionnel du vin de Champagne (CIVC) for Champagne volumes and prices
- Orbis data bank for financial statements
- Web sites of Champagne co-ops which have one
- Individual talks with co-op staff

⇒ Due to limited information, only 13 co-ops:
  - 5 co-ops selling bottles to modern retailers
  - 8 co-ops selling mainly processing services to their (vine-grower) members who sell bottles

3. Method & data

4. Results: Champagne co-ops
4. Results: Champagne co-ops

Threat of potential entrants

Potential Entrants: ALMOST NO

- High barrier to entry due to high volumes demanded by hyper and supermarkets
- High barrier to entry due to the supply of grapes of particular crus to be blended in order to guarantee quality for large volumes
- High barrier to entry due to the cost of an international commercial & logistical network

Bargaining power of suppliers

Suppliers = vine growers' POWER

- Strong bargaining power since suppliers may choose to make wine with a House and:
  - No substitute to "PDO Champagne" grapes
  - Limited area of "Champagne" vineyard
  - Limited grape yield

Threat of Substitute Products or Services

Substitutes = A LOT

- Other sparkling wines
- Other wines
- Spirits: whisky, rhum, Cognac, vodka, gin...

Legal protections and constraints

Legislation provides HIGH BARRIER TO ENTRY

- Legislation on designated areas of origin (PDO) to protect the "Champagne" name, limiting surfaces and yields
- Laws (like Evin law in France) limiting communication and advertisements on alcoholic beverages
- Laws limiting the opening up store size (for stores > 300 m2 in France, up to 2007)

Bargaining power of buyers: STRONG in EU, WEAK outside EU

Buyers = supermarkets, cafes, restaurants, wine stores

Super & hypermarket operators and hotel-restaurant chains:
- have strong bargaining power in France and Western Europe where they are highly concentrated.
- have the power to delist and reject large volumes of wine out of store shelves, so Champagne makers may be in financial danger.

Independent wine stores and cafes world-wide:
Low bargaining power because they are not very concentrated
Important sales force is required to reach a lot of individual clients

Final clients = consumers have NO POWER

Households and business men / women do not have any bargaining power. They just can refuse to buy.
4. Results: Champagne co-ops

Industry competitors = Champagne makers

Characteristics:
- Strong competition among merchants and co-ops
- Atomicity of operators among merchants and co-ops making wine
- Lack of brand homogeneity among countries

Factors of performance:
- Brand notoriety
- Volumes of wine from the same blend of vintages in order to get constant taste

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SWOT analysis

STRENGTHS

<table>
<thead>
<tr>
<th>GOVERNANCE</th>
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<tbody>
<tr>
<td>The ability to involve members (vine growers) in the management: agricultural practices = desired quality</td>
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<tr>
<th>WEAKNESSES</th>
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<td>lack of reactivity when there is no consensus</td>
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</table>

The POWER OF HAVING COMMODITY (convenience yield)
- Grapes -90% when houses of Champagne sell 66% of bottles

NO INTERNAL COST OF GRAPES
- Co-ops always buy grapes at market price and cannot cut costs that represent more than 60% of bottle price

Easy TRACEABILITY

LEGALLY ROOTED IN LOCAL REGION, by status: Easy partnership with regional government

Opportunities

- To increase monopsonistic power by grouping larger volumes of grapes
- To be consumer oriented in selling bottles in order to capture more added value
- To buy an international brand from a house to sell bottles at high price

Threats

- Decline in Champagne sales due to:
  - Economic recession
  - Substitutes (other sparkling wines and spirits)
  - Wine prohibition
  - Fashion

- No renewing of 4-year contracts with members
- A co-op member may:
  - Sell grapes to his co-op
  - Sell grapes to houses of Champagne
  - Sell his/her own bottles processed by the co-op or himself

- Climate change may alter the Champagne “Terroir”
  - Risk of early hot temperatures in April and frost later when flower blossoms
  - Acidity of grapes and wine?

- 2018: EU deregulation of vine plantation rights:
  - Vine may be planted everywhere

Champagne Cooperatives selling

| Creation | 19,58 | 1950 |
| Number of vinegrower members | 1630 | 217 |
| Number of employees | 80 | 20 |
| Vineyard (in hectare) | 1212 | 26 |
| Million bottles produced | 12 | 4.0 |
| Million bottles sold | 5,6 | 0,5 |
| Million bottles sold under own brands | 3,7 | 3.1 |
| % exports | 54% | 42% |
| Consumer Price of a Brut Champagne bottle VAT included (in €) | 19,43 | 17,68 |
| Price of a Brut Champagne bottle without VAT (in €) | 16,25 | 14,78 |

Average values

Median values

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<td>750</td>
</tr>
<tr>
<td>Number of employees</td>
<td>80</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Vineyard (in hectare)</td>
<td>1212</td>
<td>26</td>
<td>1,186</td>
</tr>
<tr>
<td>Million bottles produced</td>
<td>12</td>
<td>4.0</td>
<td>8,0</td>
</tr>
<tr>
<td>Million bottles sold</td>
<td>5,6</td>
<td>0,5</td>
<td>4,4</td>
</tr>
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4. Results: Champagne co-ops

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<tr>
<th>Key Results</th>
<th>Average values</th>
<th>Median values</th>
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<tbody>
<tr>
<td>Total Sales (in k€)</td>
<td>92 491</td>
<td>80 130</td>
</tr>
<tr>
<td>EBITDA (in k€)</td>
<td>8 100</td>
<td>6 809</td>
</tr>
<tr>
<td>EBIT – operating income (in k€)</td>
<td>6 027</td>
<td>5 148</td>
</tr>
<tr>
<td>Net Income (in k€)</td>
<td>5 526</td>
<td>4 007</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Financial Structure</th>
<th>Average values</th>
<th>Median values</th>
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<tbody>
<tr>
<td>Equity Capital / Long Term Capital</td>
<td>81,2%</td>
<td>97,2%</td>
</tr>
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<td>Financial Debt / Equity Shareholder's Funds</td>
<td>34,2%</td>
<td>19,7%</td>
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<tr>
<th>Economic Performance</th>
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<tr>
<td>Sales Growth w.r.t. previous year</td>
<td>10,3%</td>
<td>9,7%</td>
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<td>Value Added to Sales</td>
<td>16,3%</td>
<td>14,3%</td>
</tr>
<tr>
<td>Labor Costs to Value Added</td>
<td>36,6%</td>
<td>31,1%</td>
</tr>
<tr>
<td>Financial Expenses to Value Added</td>
<td>3,9%</td>
<td>2,1%</td>
</tr>
<tr>
<td>EBITDA to Invested Capital</td>
<td>13,4%</td>
<td>12,5%</td>
</tr>
<tr>
<td>EBITDA to Sales</td>
<td>10,5%</td>
<td>8,1%</td>
</tr>
<tr>
<td>Operating margin (= EBIT) to Sales</td>
<td>7,9%</td>
<td>6,2%</td>
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<tr>
<th>Profitability</th>
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<tr>
<td>Profit margin on Sales</td>
<td>8,3%</td>
<td>6,0%</td>
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<tr>
<td>Return on equity (ROE)</td>
<td>10,5%</td>
<td>11,1%</td>
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5. Conclusion

1. **Co-ops processing and selling Champagne have quite low debt level.** So, they seem able to absorb current sales decline.

2. **But trade-off between business risk and financial risk:** Co-ops producing and selling bottles to modern retailers (high business risk) are less leveraged (low financial debt risk) than co-ops which mainly provide services to their members.

3. Further research may be done to quantify the impact of the current decline in bottle sales on co-ops financial situation.